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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/841,687	04/23/2001	Robert F. Tow	INT1P034	4379

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EXAMINER

PESIN, BORIS M

ART UNIT	PAPER NUMBER
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2174

DATE MAILED: 01/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/841,687

Applicant(s)

TOW ET AL.

Examiner

Boris Pesin

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-53 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-53 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). ____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____ 6) ☐ Other:

DETAILED ACTION

The disclosure is objected to because of the following informalities:

On page 20 of the detailed specification, line 12, the sentence that begins with "For example, if we correlation..." seems to have a grammatical error. The examiner believes the "we" should be "the".

Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

1. Claim 5 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The applicant in the claim talks about "inverse discrete cosine transform", however this limitation is not mentioned in the specification.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-2, 6, 17, 24, 28, 32, 35, 38, 42, and 43 are rejected under 35

U.S.C. 102(b) as being anticipated by Perlman et al. (US 6141693).

In regards to claim 1, Perlman teaches a method of identifying motion information associated with a compressed bit stream (i.e. the video processor uses the received auxiliary data to identify a portion of the at least one video frame, Abstract, Line 12). He further discloses a method for processing motion information to generate processed motion information (i.e, render a motion picture on a video display device, Column 8, Line 66). He further provides a method for providing the processed motion information to the client, wherein providing the processed motion information allows the client to identify video information in the bit stream (i.e. video stream to the client, Column 3, Line 50).

In regards to claim 2, Perlman teaches that the compressed bit stream is an MPEG compressed bit stream. (Column 6, Line 59)

In regards to claim 6, Perlman does not disclose that using inverse discrete cosine transform to acquire motion vectors from the stream, therefore it is understood that it not used in his invention.

In regards to claim 17, it is in the same context as claim 1 and 2, except that it includes the capability of displaying the information in a graphical user interface.

Perlman's invention discloses a graphical user interface. (Column 4, Line 44)

Claim 24 is in the same context as claim 1; it is therefore rejected under similar rationale.

Claim 28 is in the same context as claim 1; it is therefore rejected under similar rationale.

Claim 32 is in the same context as claim 1 and 2; it is therefore rejected under similar rationale.

Claim 35 is in the same context as claim 1 and 2; but it talks about computer code and a computer program. It is inherent in Perlman's invention that a computer program is used and therefore computer code is used.

Claim 38 is in the same context as claim 1 and 2, but it talks about the hardware aspects of the invention. Perlman discloses in his invention an interface (Column 7, Line 53), memory (Column 4, Line 5), and a CPU (Column 4, Line 4).

In regards to claim 42, Perlman discloses that you can store motion information in a database. (Column 1, Line 60)

Claim 43 is in the same context as claim 3; it is therefore rejected under similar rationale.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
 2. Ascertaining the differences between the prior art and the claims at issue.
 3. Resolving the level of ordinary skill in the pertinent art.
 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
3. Claims 3, 18, 25, 33, 36, and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Perlman et. al. (US 6141693) in view of Kuhn et al. (US 6297845).

In regards to claim 3, Perlman teaches all the limitations of claim 1. Perlman does not teach the limitation of having color bars provided to the client with the motion information. Kuhn teaches that color bars are already used in an NTSC signal (Column 6, Line 16). It would have been obvious to one of ordinary skill in the art at the time of the invention to use the teachings of Kuhn and modify Perlman to include color bars with the motivation provided to increase the quality of information provided.

Claim 18 is in the same context as claim 3; it is therefore rejected under similar rationale.

Claim 25 is in the same context as claim 3; it is therefore rejected under similar rationale.

Claim 33 is in the same context as claim 3; it is therefore rejected under similar rationale.

Claim 36 is in the same context as claim 3; it is therefore rejected under similar rationale.

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Claim 39 is in the same context as claim 3; it is therefore rejected under similar rationale.

4. Claims 4, 19, 26, 34, 37, and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Perlman et. al. (US 6141693) in view of Yim (US 6452969).

In regards to claim 4, Perlman teaches all the limitations of claim 1. Perlman does not teach that processed information is represented using hue, brightness, and saturation. Yim teaches, "the trichromatic theory of color vision implies that the perceived intensity of light which is made up of brightness, hue and saturation may be duplicated by an appropriate combination of three primary colors. Accordingly, each video frame may be represented by a grid of first primary color pels, second primary color pels, and third primary color pels." (Column 4, Line 52). It would have been obvious to one of ordinary skill in the art at the time of the invention to use the teachings of Yim and modify Perlman to include a method for representing the video with hue, brightness, and saturation with the motivation provided for reducing the cost of the system (Yim, Column 2, Line 28).

Claim 19 is in the same context as claim 4; it is therefore rejected under similar rationale.

Claim 26 is in the same context as claim 4; it is therefore rejected under similar rationale.

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Claim 34 is in the same context as claim 4; it is therefore rejected under similar rationale.

Claim 37 is in the same context as claim 4; it is therefore rejected under similar rationale.

Claim 40 is in the same context as claim 4; it is therefore rejected under similar rationale.

5. Claims 5, 27, and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Perlman et. al. (US 6141693) in view of Richmond et al. (US 5805156).

In regards to claim 5, Perlman teaches all the limitations of claim 1. Perlman does not teach the method of representing processed motion using an alarm.

Richmond teaches, "In another scenario, the gateway computer system ... transmits an alert to a client computer system, wherein the user does not desire to immediately view the select media stream. The alert may consist of any audio/visual alarm." (Column 8, Line 42). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Perlman with the teachings of Richmond for the purpose of representing the feed using an alarm with the motivation to provide for making the system more informative for the user.

Claim 27 is in the same context as claim 5; it is therefore rejected under similar rationale.

Claim 41 is in the same context as claim 5; it is therefore rejected under similar rationale.

6. Claims 7, 8, 20, 21, 44, and 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Perlman et. al. (US 6141693) in view of Wilcox et al. (US 6072542).

In regards to claim 7, Perlman teaches all the limitations of claim 1. Perlman does not teach a method for determining motion information coherence. Wilcox teaches, "The presence of motion is detected using two motion features computed from the coherence of motion vectors of nine, evenly-distributed blocks in each frame." (Column 6, Line 3). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Perlman with the teachings of Wilcox to include a method for determining motion coherence with the motivation to provide for more accurate identification of video segments. (Column 2, Line 20).

In regards to claim 8, Wilcox teaches, "The first feature is the magnitude of the average of the nine motion vectors. The second feature is the average magnitude of the nine motion vectors." (Column 6, Line 5).

Claim 20 is in the same context as claim 7; it is therefore rejected under similar rationale.

Claim 21 is in the same context as claim 8; it is therefore rejected under similar rationale.

Claim 44 is in the same context as claim 7; it is therefore rejected under similar rationale.

Claim 45 is in the same context as claim 8; it is therefore rejected under similar rationale.

7. Claims 9, 10, 22, 23, 46, 47 is rejected under 35 U.S.C. 103(a) as being unpatentable over Perlman et. al. (US 6141693) in view of Etoh (US 6081551).

In regards to claim 9, Perlman teaches all the limitations of claim 1. Perlman does not teach the limitation of comparing motion information in the bit stream with a motion information template. Etoh teaches, "...if it is judged by the correlation comparator ... that there is high correlation between the input image and the template, then the weighted motion compensator ... is selected, and pixels for the associated weighted region are input from the template" (Column 8, Line 39). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Perlman using the teachings of Etoh to include a way to compare motion in a bit stream (i.e. input image) to that of a template with the motivation to provide for a sharper image quality. (Column 2, Line 55).

In regards to claim 10, Etoh teaches, "...if it is judged by the correlation comparator ... that there is high correlation between the input image and the template, then the weighted motion compensator ... is selected, and pixels for the associated weighted region are input from the template" (Column 8, Line 39).

Claim 22 is in the same context as claim 9; it is therefore rejected under similar rationale.

Claim 23 is in the same context as claim 10; it is therefore rejected under similar rationale.

Claim 46 is in the same context as claim 9; it is therefore rejected under similar rationale.

Claim 47 is in the same context as claim 10; it is therefore rejected under similar rationale.

8. Claims 11, 12, 30, 48, and 49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Perlman et. al. (US 6141693) in view of Rao et al. (US 6041142).

In regards to claim 11, Perlman teaches all the limitations of claim 1. He does not teach the limitation of identifying a scene cut using processed motion information. Rao teaches that in his invention, "The video data stream analyzer detects, i.e., identifies, a scene cut in a video data stream" (Column 7, Line 58). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Perlman with the teachings of Rao to include a method for identifying a scene cut with the motivation for faster transmission of the video feed.

In regards to claim 12, Rao discloses a display, (i.e. client, Figure 3, Element 130), that receives all of the processed information including the scene cut information.

Claim 30 is in the same context as claim 11; it is therefore rejected under similar rationale.

Claim 48 is in the same context as claim 11; it is therefore rejected under similar rationale.

Claim 49 is in the same context as claim 12; it is therefore rejected under similar rationale.

9. Claims 13, 14, 29, 50, 51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Perlman et. al. (US 6141693) in view of Wang et al. (US 6212657).

In regards to claim 13, Perlman teaches all the limitations of claim 1. Perlman does not teach the limitation of identifying audio information from the compressed bit stream. Wang teaches "It should be understood that . . . the term "video" includes content having both audio and visual portions or exclusively audio or exclusively visual content, as well as other types of digital content." (Column 1, Line 35). He further teaches that "In one embodiment [of his invention], the processing modules are video decoders, each dedicated to decompressing a video data stream." (Column 3, Line 35). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Perlman with the teachings of Wang to include a method for identifying audio data with the motivation provided for transmitting sound.

In regards to claim 14, Wang teaches, "Video processors . . . receive video data (that form a video stream) from memory buffer . . . under the control of CPU . . . and then process each video stream for delivery to a client . . ." (Column 8, Line 20).

Claim 29 is in the same context as claim 13; it is therefore rejected under similar rationale.

Claim 50 is in the same context as claim 13; it is therefore rejected under similar rationale.

Claim 51 is in the same context as claim 14; it is therefore rejected under similar rationale.

10. Claims 15, 16, 31, 52, and 53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Perlman et. al. (US 6141693) in view of Bohrman (US 5109482).

In regards to claim 15, Perlman teaches all the limitations of claim 1. Perlman does not teach the limitation of identifying editorial information from the bit stream. Bohrman teaches in his invention "the system has the capability to retrieve background editorial information about the video segments, which the user can review and manipulate as desired, or add user-created textual information about the selected clips." (Column 2, Line 53). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Perlman using the teachings of Bohrman to include a method of identifying and retrieving the editorial information from the video with the motivation provided for easy manipulation of the video feed.

In regards to claim 16, Bohrman teaches that a computer (Figure 1, Element 10), or a client, is used to retrieve the editorial information.

Claim 31 is in the same context as claim 15; it is therefore rejected under similar rationale.

Claim 52 is in the same context as claim 15; it is therefore rejected under similar rationale.

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Claim 53 is in the same context as claim 16; it is therefore rejected under similar rationale.

The prior art made of record and is considered pertinent to applicant's disclosure.

US006141693A	Perlman et al
US006297845B1	Kuhn et al
US006452969B1	Yim
US005805156A	Richmond et al
US006072542A	Wilcox et al
US006081551A	Etoh
US006041142A	Rao et al
US006212657B1	Wang et al
US005109482A	Bohrman

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Boris Pesin whose telephone number is (703) 305-8774. The examiner can normally be reached on Monday-Friday with the exception of every other Friday.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kristine Kincaid can be reached on (703) 308-0640. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Kristine Kincaid
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